

# **iPF5000 Ink Consumption Data**

**Revised June 18, 2007**

Revised test sequence based on forum reader suggestions. **The major change in the testing was to isolate the initial startup ink consumption after the printer had been turned off for an extended period of time.** Time period in this case was two weeks.

The assumption used for the ink weight remained the same. 1 gram equals 1 milliliter of ink.

Scale used for data collections remained the same. American Weigh Scale Model CH-501. Capacity 500 grams. Scale measures to .01 grams. Calibration weights 500 grams. Typical re-weighing of the same cartridge varied by no more than .02 grams. Additionally, each cartridge was weighed two times vs. one time in the original test.

The firmware used remained the same. Ver 1.23. This was done to isolate the firmware version. Aside from the firmware version, all other iPF5000 related software available 5/15/2007 was installed prior to the original test and remained the same. A minor amount of printing was done after the original test and prior to turning the printer off for the two-week period. Ink consumed during this minor printing is not part of this data.

Computer system remained the same with a generic desktop PC, Windows XP Pro and 1GB of memory. The ambient temperature of the room the printer is located remained the same at approximately 65 to 75 degrees Fahrenheit.

The spreadsheet order of ink cartridges was changed to reflect the sequence of cartridges installed in the iPF5000.

Maintenance cartridge free space was checked, showing 60% free space.

6/2/2007 @2:25 - 2:35 P.M. PST each cartridge was weighed two times.

6/2/2007 @2:36 P.M. the printer was turned on to begin the initialization/startup cycle. Cycle was completed @2:43 P.M. & 15 seconds. 7-1/4 minutes. Printer remained on and each cartridge was weighed two times between 2:45-2:55 P.M.

## iPF5000 Turned Off For Two Weeks

### Ink Consumed During Initialization/Startup Cycle

Cartridge Item Description:	Beginning (g)	Ending (g)	Net Ink Used:
PFI-101 Yellow	88.83 grams	82.40 grams	6.43 grams
PFI-101 Photo Cyan	91.75 grams	86.03 grams	5.72 grams
PFI-101 Cyan	94.90 grams	89.87 grams	5.03 grams
PFI-101 Photo Grey	90.30 grams	84.48 grams	5.82 grams
PFI-101 Grey	86.72 grams	81.12 grams	5.60 grams
PFI-101 Matte Black	91.48 grams	85.61 grams	5.87 grams
PFI-101 Photo Magenta	85.76 grams	78.69 grams	7.07 grams
PFI-101 Magenta	89.21 grams	83.55 grams	5.66 grams
PFI-101 Black	90.82 grams	84.86 grams	5.96 grams
PFI-101 Red	96.16 grams	90.58 grams	5.58 grams
PFI-101 Green	89.92 grams	84.11 grams	5.81 grams
PFI-101 Blue	89.62 grams	83.11 grams	6.51 grams

Total ink consumed during this one initialization/startup cycle was **71.06** grams or milliliters.

Without any variables being changed, the total ink consumed during just this one initialization/startup cycle after the printer had been turned off for two weeks exceeded the total ink consumed during the original test by approximately 40%. No software changes. No hardware changes. No environmental changes.

Printer remains on in standby mode. Each cartridge will be re-weighed in two weeks to determine the ink consumption while in standby mode only.

6/16/2007: Printer had remained in standby mode for two weeks. Printer remained on and each cartridge was weighed two times between 2:25-2:35 P.M. to determine ink consumption during the previous two weeks.

## **iPF5000 in Standby Mode For Two Weeks**

### **Ink Consumed During This Two Week Period**

Cartridge Item Description:	Beginning (g)	Ending (g)	Net Ink Used:
PFI-101 Yellow	82.40 grams	81.18 grams	1.22 grams
PFI-101 Photo Cyan	86.03 grams	84.80 grams	1.23 grams
PFI-101 Cyan	89.87 grams	88.35 grams	1.52 grams
PFI-101 Photo Grey	84.48 grams	83.27 grams	1.21 grams
PFI-101 Grey	81.12 grams	79.88 grams	1.24 grams
PFI-101 Matte Black	85.61 grams	83.78 grams	1.83 grams
PFI-101 Photo Magenta	78.69 grams	77.70 grams	0.99 grams
PFI-101 Magenta	83.55 grams	81.81 grams	1.74 grams
PFI-101 Black	84.86 grams	83.40 grams	1.46 grams
PFI-101 Red	90.58 grams	89.54 grams	1.04 grams
PFI-101 Green	84.11 grams	83.00 grams	1.11 grams
PFI-101 Blue	83.11 grams	81.60 grams	1.51 grams

Total ink consumed during this two-week period in standby mode was **16.10** grams or milliliters. Printer was turned off at 2:40 P.M. 6/16/2007.

In correspondence with Canon management in early June 2007, response to a question regarding ink consumption in relation to firmware versions was; "Based on the information provided by my engineers the newer firmware (1.25) actually uses less ink because it extended the time between cleaning cycles." This individual was then asked for the time between cleaning cycles for versions 1.23 & 1.25 as it appeared by their reply that there was a fixed time interval. The individual was also asked if the cleaning cycles initiated whether the printer was used frequently or infrequently. No response to these questions have been received as of 6/18/2007. On a side note regarding operational manuals (hard copy or CD/DVD) being developed and provided for the iPF5000; Response: "Right now I am being told that it will be on CD and only with the new units (5100). The new CD will contain a PDF version for printing. I have asked that we consider making it available for ipf5000 users. Key here is the differences between the 5000 and the 5100. They will let me know." It is my understanding that all decisions are ultimately made in Japan. Canon USA appears to have very little autonomy.

June 12, 2007 called Canon Wide Format Technical Support and spoke with an individual who claimed to have nearly ten years with canon in the wide format area. Asked technician if firmware version 1.23 vs. 1.25 would affect the cleaning cycle and ultimately ink consumption in any way. Technician discussed with a second seasoned technician and confirmed there was no difference between the two versions with regards to the cleaning cycle. Technician stated the cleaning cycle occurred approximately every two hours.

Technician was asked for Canon's recommendation regarding turning the printer off vs. leaving the printer on during periods printer was not in use. Recommendation was to leave printer on in sleep mode if the printer is used daily. Recommendation was to turn the printer off if the printer will not be used for two or more days.

This response set the parameters for one additional ink consumption test.

As stated earlier, the printer was turned off at 2:40 P.M. 6/16/2007 at the conclusion of the two-week standby mode ink consumption test. The printer was turned back on at 5:59 P.M. 6/18/2007 or slightly more than two days. The startup cycle was completed at 6:03 P.M. Total cycle time was 4 minutes. Each cartridge was then weighed two times.

## **iPF5000 Turned Off For Two Days**

### **Ink Consumed During Initialization/Startup Cycle**

Cartridge Item Description:	Beginning (g)	Ending (g)	Net Ink Used:
PFI-101 Yellow	81.18 grams	79.15 grams	2.03 grams
PFI-101 Photo Cyan	84.80 grams	82.76 grams	2.04 grams
PFI-101 Cyan	88.35 grams	86.42 grams	1.93 grams
PFI-101 Photo Grey	83.27 grams	81.18 grams	2.09 grams
PFI-101 Grey	79.88 grams	77.74 grams	2.14 grams
PFI-101 Matte Black	83.78 grams	81.53 grams	2.25 grams
PFI-101 Photo Magenta	77.70 grams	75.37 grams	2.33 grams
PFI-101 Magenta	81.81 grams	79.53 grams	2.28grams
PFI-101 Black	83.40 grams	81.13 grams	2.27 grams
PFI-101 Red	89.54 grams	87.38 grams	2.16 grams
PFI-101 Green	83.00 grams	80.67 grams	2.33 grams
PFI-101 Blue	81.60 grams	79.33 grams	2.27 grams

After being turned off for just two days, the total ink consumed during this initialization/startup cycle was **26.12** grams or milliliters.

## Conclusions & Opinions:

Canon **does not** have their act together a full year after release of the iPF5000 printer.

The printer is a cash cow with regard to ink consumption.

There are additional variables in the printhead nozzles, etc. that will not allow you to repeat with precise accuracy the ink consumed under similar circumstances.

Leave the printer on all the time, as the flow of blood (cash) is constant but slower than turning the printer off then on again when printing.

Accurate and essential technical information is not disseminated to technical support staff and therefore not to the consumer.

Talk with one individual who should know and you get one answer. Talk with another individual who should also know and you get an entirely different answer.

Canon's position in not providing a professional operational manual is outrageous. Furthermore, the manual for such a piece of equipment should be available in hard copy form.